

Attorney's Docket No.: 14580-037001/FP2022

Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Original) A method for forming a ferrocapacitor includes the steps of:
 - depositing a ferroelectric material over an insulating layer;
 - a first etching step of etching of the ferroelectric material to form openings in it;
 - depositing an electrode layer into the openings formed in the ferroelectric layer;
 - a second etching step, after depositing the electrode layer, of etching the insulating layer at the bottom of the openings to form gaps in it; and
 - inserting conductive material into the gaps.

2. (Original) A method according to claim 1 in which the first etching step leaves a film of ferroelectric material remaining at the bottom of the openings, and the film of ferroelectric material is removed during the second etching step.

3. (Currently amended) A method according to claim 1 including a step of planarizing the top of to form a flat upper surface on the remaining ferroelectric material ~~to a~~

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~~planarization level~~ and depositing an insulating layer over it.

4. (Original) A method according to claim 1 in which the conductive material substantially fills the openings at least up to the planarization level.

5. (Withdrawn) A ferroelectric capacitor produced by a method according to claim 1.

6. (Withdrawn) A FeRAM device including a ferrocapacitor produced by a method according to claim 1.

7. (New) A method for forming a ferrocapacitor including the steps of:

depositing a ferroelectric material over an insulating layer;

a first etching step of etching of the ferroelectric material to form openings in it, depositing an electrode layer into the openings formed in the ferroelectric layer in which the first etching step leaves a film of ferroelectric material remaining at the bottom of the openings;

a second etching step, after depositing the electrode layer, of etching the insulating layer at the bottom of the

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openings to form gaps in it and to remove the film of
ferroelectric material; and
inserting conductive material into the gaps.